

PALEONTOLOGY.—*Notes on prionodont pelecypods.* DAVID NICOL, Southern Illinois University, Carbondale, Ill.

(Received September 4, 1958)

TIME OF ORIGIN OF THE PRIONODONTA

Newell (1954, p. 168) has given the first known appearance of several of the families and superfamilies of pelecypods. Unfortunately, however, he gave only the geologic Period in each case.

Data of a more precise nature on the first known appearance of the genera and higher categories of the Pelecypoda are of prime importance and should be presented when known. There are two reasons why this information is valuable. One is for the study of the phylogeny of the Pelecypoda. The second reason, which is the more immediately practical one, is the application to stratigraphy. This type of datum would be particularly important in regions where the stratigraphy is little known. Most families and orders appear quite suddenly in the record and become abundant and geographically widespread in an amazingly short geologic time. These major groups are usually quite distinct from their nearest relatives and can easily be identified even by the nonexpert.

One such sudden arrival on the scene is the very distinct pelecypod suborder Prionodonta, represented by the genus *Parallelodon*. The Prionodonta comprise the families Parallelodontidae, Cucullaeidae, Arcidae, Glycymerididae, and others. The prionodonts suddenly make their appearance in strata of the Hamilton Group of North America and the nearly corresponding (in time) Eifelian and Givetian Stages of Europe. In more general terms, this would be the Middle Devonian. Therefore, we can now say that if a stratum contains specimens of *Parallelodon* it probably is not older than Middle Devonian. Further study could probably delineate the first appearance of the prionodonts more precisely.

ADDITIONAL CUCULLAEID GENERA

Because of the continual introduction of new genera and the reranking or reallocating of others, the study of any family of pelecypods should be periodically reconsidered. W. H. Dall is said to have contended that any generic review of a molluscan family would be out of date and in need of revision within 25 years.

My study of the Cucullaeidae (Nicol, 1954) lacks one subgenus and one genus. The former I had overlooked, and the latter was proposed after my paper was published. To bring my work up to date, I now call them to the attention of other paleontologists. This brings to 23 the number of validly proposed genera and subgenera of cucullaeids.

Pleurogrammatodon Ichikawa and Maeda, 1958, pp. 63–64. Type species (original designation): *Pleurogrammatodon splendens* Ichikawa and Maeda, 1958; Upper Cretaceous, Campanian and/or Maestrichtian; Awaji Island and the Izumi mountain-range, Japan. Figured by Ichikawa and Maeda, 1958, pl. 1.

Spinarcullaea Chavan, 1952, pp. 10–11. Type species (original designation): *Arcullaea* (*Spinarcullaea*) *cristata* Chavan, 1952; Upper Jurassic, Astartien = Kimeridgian; Cordebugle (Calvados) France. Figured by Chavan, 1952, text fig. 3; pl. 1, figs. 14–15.

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